

# A Qualitative Exploration of Gender in the Context of Injection Drug Use in Two US–Mexico Border Cities

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**Abstract** Injection drug use is of increasing concern along the U.S.–Mexico border where Tijuana and Ciudad (Cd.) Juárez are located. We conducted a qualitative study to explore the context of drug use, with a focus on gender differences. In-depth interviews were conducted with 10 male and 10 female injection drug users (IDUs) in Tijuana and 15 male and 8 female IDUs in Cd. Juárez. Topics included types of drugs used, injection settings, access to sterile needles and environmental influences. Interviews were taped, transcribed and translated. Content analysis was conducted to identify themes. Several themes emerged

with respect to gender: (a) how drugs were obtained; (b) where drugs were used; (c) relationship dynamics surrounding drug use; and (d) sex in exchange for money or drugs. Men reported buying and injecting in shooting galleries and other locations, whereas women tended to buy and inject drugs with people they knew and trusted. All men reported having shared syringes in shooting galleries, often with strangers. In these two cities, venue-based interventions may be more appropriate for male IDUs, whereas personal network interventions may be more appropriate among female IDUs.

**Keywords** Injection drug use · Gender · Mexico · Social networks

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## Introduction

The border between the United States and Mexico experiences the highest volume of personal and commercial border crossings in the world (Lange, Lauer, & Voas, 1999). There are tremendous social inequities along this 2,000-mile border, which is reportedly the most extensive land frontier separating a developed and developing country. The gap in median incomes between inhabitants of Mexico and the USA is reportedly the largest between any two contiguous countries (Huntington, 2004).

Two of the largest cities on the Mexican–U.S. border are Tijuana and Ciudad (Cd.) Juárez. Tijuana is home to an estimated population of 1.27 million people and is adjacent to the city of San Diego, California (Instituto Nacional de Estadística Geografía e Informática [INEGI], 2000). Almost one quarter of Tijuana's

population over 5 years old have recently arrived in Tijuana or are en route to the USA (SDSU Institute for Regional Studies of the Californias, 2004).

Cd. Juarez is situated at the approximate mid-point of the 2,000 mile long border between Mexico and the US, across from El Paso, Texas with a population of approximately 1.2 million people (INEGI, 2000). An estimated 60% of its inhabitants have arrived from other parts of Mexico, with an estimated 300 persons who arrive daily and a transient population of 250,000 individuals (Procuraduría General de Justicia del Estado de Chihuahua, 2005; Secretaría de Relaciones Exteriores, 2004).

Tijuana and Cd. Juarez also share the dubious reputation of being major epicentres for drug abuse, and both lie on major drug trafficking routes (Brouwer et al., 2006a; Bucardo et al., 2005). Tijuana is thought to have one of the fastest growing drug user populations in Mexico with three times the national average consuming illicit drugs (Secretaria de Salud, 1999; Magis-Rodriguez et al., 2002). In 2004, there were an estimated 6,000 persons injecting in more than 200 shooting galleries in Tijuana. However, the total number of IDUs in Tijuana may be as high as 10,000 (Brouwer et al., 2006a). In Mexico overall, men are 13 times more likely to use an illicit drug in their lifetime than women, however, in Tijuana this ratio is 6:1 (Secretaría de Salubridad y Asistencia [SSA], 1998).

Cd. Juarez is ranked second only to Tijuana in the number of illicit drug users, which is estimated to be twice the national average (SSA, 1998). In 2001, a community-based survey estimated that there were approximately 6,000 IDUs in Cd. Juarez (Cravioto, 2003). There may be considerable overlap between populations of IDUs and female sex workers in Cd. Juarez. In 2005, Patterson et al. found that three quarters of female sex workers in Cd. Juarez had ever injected an illegal drug, compared to one quarter in Tijuana (Patterson et al., 2005). In contrast, only 10% of female sex workers reported injecting drugs in 1992 (Valdez, Cepeda, Kaplan, & Codina, 2002).

Concerns that injection drug use is on the rise in Tijuana and Cd. Juarez have implications for the transmission of blood-borne infections such as HIV and viral hepatitis. HIV prevalence among IDUs and other high-risk groups in Mexico has thus far remained low (UNAIDS, 2002), but a seroprevalence study of pregnant women in Tijuana observed an HIV prevalence of 1.1% overall; 0% among non-drug using women and 6% among those admitting injection drug use (Viani et al., 2006). Mexican and border health officials have expressed concern that these data represent a looming HIV epidemic linked to drug use.

Brouwer and colleagues recently estimated that as many as one in 125 adults aged 15–49 in Tijuana may be infected with HIV (Brouwer et al., 2006b).

Given the limited information on injection behaviours in the U.S.–Mexico border region, we conducted a qualitative study to describe the context of injection drug use and HIV-related injection risks among IDUs in Tijuana and Cd. Juarez, Mexico in 2004. In this paper, we explore potential gender differences in drug use in both cities, which may have important implications for prevention programs aimed at curbing drug abuse and its associated harms.

## Methods

Between April and July 2004, trained Mexican interviewers recruited 43 injection drug users (IDUs) who had injected at least once in the past month in Tijuana and Cd. Juarez. In Tijuana, 10 men and 10 women were interviewed, while in Cd. Juarez, 15 men and 8 women participated. Using qualitative methods that include in-depth interviews can generate rich and insightful narratives that may illuminate the behaviours and life experiences of a group of individuals without imposing pre-determined variables or boundaries (Emerson, 2001). Clearly emerging were the distinctive experiences of men and women in the context of injection drug use in these environments.

In order to better understand variability in drug use patterns, targeted sampling methods (Watters & Biernacki, 1989) were used to recruit a balanced number of male and female IDUs in each study site. Interviewers contacted potential participants and informally screened for eligibility among willing participants in street locations and neighbourhoods known for drug use, in shooting galleries and in drug treatment programs. After providing written informed consent, a brief, structured screening form consisting of 20 questions was administered by the interviewer to collect sociodemographic information such as age, employment status, and primary drug used. To optimize rapport, interviewers were matched to respondents based on gender. Interviews were conducted in private locations based on availability and client preference (e.g. drug treatment programs, outreach offices and participants' homes).

Interviews were open-ended and conversational. An interview guide was used to remind interviewers of the topics to be covered, which included types of drugs used, injection settings and venues, perceived barriers related to acquiring sterile injection equipment, and environmental influences affecting drug use (e.g., police, and

border security). Each tape-recorded interview lasted approximately an hour for which participants received 200 pesos (approximately \$20 USD) as compensation for their time. No identifiers were recorded.

Interviews were taped, transcribed, and translated from Spanish into English verbatim. A dictionary was developed to catalogue various words and phrases used in the local drug culture. Content analysis was conducted to identify differences between male and female experiences and behaviours with respect to the topic areas covered by the interview guide. Several main themes were then identified and transcripts were hand-coded, first by one investigator (MFC) and then a second time by two investigators (MFC and AM), who compared coded transcripts for consistency and agreement on emergent themes. Any discrepancies were discussed and then clarified for a subsequent round of coding.

## Results

### Quantitative findings

The median age of males in both the Tijuana and Cd. Juarez samples was 34 years, while the women were slightly younger in Cd. Juarez with a median of 28.5 years as compared to 30 years in Tijuana. Among the Tijuana sample, 90% of the males were born in that city, whereas only 40% of the women were born there. In Cd. Juarez, approximately three quarters of both men and women were born in that city. Of the 20 participants in Tijuana, half of the men and two thirds of the women were married, while in Cd. Juarez, a third of the men and two thirds of the women were married. Men and women differed in terms of where they had lived or slept in the past 6 months, whereby 7 of the women in Tijuana listed their own place compared to only 1 woman in Cd. Juarez. Overall, 7 men and 5 women in Tijuana reported having slept in jail or on the streets as compared to 8 men and 3 women in Cd. Juarez. The age at first injection was slightly younger for men and women in Cd. Juarez sample, with a median of 19 and 20, respectively, as compared to a median of 21 years for both men and women in Tijuana.

The majority of men and women in both study sites injected drugs every day. When asked which drug they inject most frequently, in Tijuana, 6 men and 6 women reported heroin alone, 4 men reported heroin combined with crystal methamphetamine, and 3 women reported methamphetamine alone. In Cd. Juarez, 10

men and 4 women chose heroin alone, while the remaining 5 men and 4 women, chose heroin mixed with cocaine ('speedball').

### Qualitative findings

Four main themes emerged in the interviews with respect to gender differences between male and female drug users in Cd. Juarez and Tijuana: (a) the manner in which they obtained drugs; (b) the places where drugs were used; (c) the influence of relationships on drug use and associated risk behaviours; and (d) sex trade involvement. These themes are explored more fully below.

#### Obtaining drugs

Male and female IDUs in Tijuana and Cd. Juarez reported different ways in which they purchased drugs. The majority of women described buying drugs either within their own homes or at a location very close to where they live. Two women in Cd. Juarez established a delivery schedule, whereby a man brought drugs directly to their homes.

I: but you said that he goes to your house?

S: Yes, yes he goes with us... and says "the breakfast arrived", "Dinner is here," and then we know, and then he just arrives, we pay and he gives it to us. (Female, age 30, Cd. Juarez)

'A guy that has cures [drugs] comes at certain times, he came around 6:30 in the morning and I bought from him, so I got the 20 pesos I needed and I bought from him...' (Female, age 34, Cd. Juarez)

In Tijuana, several women reported purchasing drugs by phoning a dealer and arranging delivery to their homes.

'On the street, in a house, or you call on the phone and they take it to you, they take it to your house'. (Female, age 30, Tijuana)

When women did leave their homes to obtain drugs, many reported staying close by and remaining in neighbourhoods where they were familiar with local drug dealers' establishments ('connectas') and protocol for conducting the exchange.

I: How did you get it, the drug?

S: Right there, close to the house, two blocks away they sell it, they sell both things [heroin and methamphetamine]. (Female, age 47, Tijuana)

‘...like I said, in my house I know they sell it next door, on the corner of the store, like I said, in front of my house...’ (Female, age 22, Tijuana)  
 ‘In the connectas, there’s uhh, there’s places, where I can go, coming out of your house, your neighbours...’ (Female, age 42, Tijuana)

Women’s responsibilities as mothers and wives also appeared to influence their decision-making around the purchase of their drugs. As one female drug user in Juarez explained:

‘So, we go and we buy it, and let’s say that these guys don’t go out to get money, then they let us use their house, because I have kids and I can’t do it at home, they let us use their house, and we go there and we shoot up and from what we have, we give them...’ (Female, age 25, Cd. Juarez)

In contrast, the majority of male IDUs in both Juarez and Tijuana reported buying drugs in many different places throughout each city, such as shooting galleries (‘picaderos’), local shops (‘tienditas’), bars (‘cantinas’), vacant lots, abandoned homes, markets and street corners.

‘Well here there are many ‘tienditas’ we call them like that, “tienditas” or “picaderos”, there are many, let’s say very close, we don’t have problems getting to them, what we have problems about is to get the money... someone who sells popcorn, someone who sells newspaper, there by the avenida de los héroes, there is a boy who sells newspaper but it is just to hide, he sells heroin too’. (Male, age 37, Tijuana)

Unlike some of the women who consistently purchased drugs from the same person or place, the majority of male IDUs in Tijuana and Juarez described the range of options that were available to them in terms of location and types of drugs being sold.

I: What other places? [To buy drugs]

S: Like in the bars, or in the cantinas, in stores, in grocery stores as well, around where I live there is a grocery store and the owner sells cocaine, just cocaine...

I: Tell me about this last time that you injected, where did you get the drug this last time?

S: It was like two hours ago, around where I live downtown, in a mechanic shop, there is a guy and one gets it there. (Male, age 30, Cd. Juarez)

‘Well there are different places, they are everywhere, in any corner they sell it to you, in any one, as soon as they see you, and if you have the

appearance of an addict they approach you right away to offer you the vice’. (Male, age 31, Cd. Juarez)

#### Where drugs were used

Male and female IDUs in both cities distinguished between where drugs were purchased and the location in which drugs were used. For the majority of women, even those who bought drugs in the streets, the preparation and injection of drugs occurred inside the home.

‘...its just that the guy that was there, almost all the time we hang out together, we do things together, we cure [inject drugs] together, but like, not in a place like going to shooting galleries, I just go to those place to buy and then I go home’. (Female, age 34, Cd. Juarez)

This same participant reported feeling uncomfortable injecting in a shooting gallery where there were a lot of men she did not know. As a woman, she felt particularly vulnerable and unaccepted, as reflected here:

‘He told me to go with his friend, and I went, but I didn’t like it, because I entered [into the shooting gallery] and, and there were many dudes without t-shirts, and where I go there is a lot of trust, and they asked me “Blondie, can I take my t-shirt off?”... I was just going to do my thing [inject her dose], and he almost kicked me out, I don’t think they accept women anywhere’. (Female, age 25, Cd. Juarez)

In contrast, all males in both cities ( $N = 24$ ) reported having injected and used shared needles in a shooting gallery. In addition, men in both sites listed injecting in many other locations, including abandoned lots, houses or cars as other common places where they injected drugs.

I: Where you inject, where is that? In a room?

S: As I told you, in between two cars, where they don’t pass, where the patrol [police] doesn’t see me. (Male, age 35, Cd. Juarez)

‘Well, in places where one is alone, hiding in abandoned houses, abandoned cars or like here, hidden between the trees, there’s places where one can hide so people won’t see ...’ (Male, age 44, Tijuana)

Several men also explained that at times the feelings of withdrawal were so intense and the need to inject

was so immediate that they often injected in the street or out in the open.

‘There are others, other empty lots, other houses that we use as shooting galleries, and there are many that, that have no shame and just do it [inject drugs] anywhere, where they buy it, just a couple steps away from there they go behind the cars and there they do their “coqueada” [preparation] and then inject, I mean without taking any precaution so that people don’t see them’. (Male, age 35, Cd. Juarez)

‘I mean once you get it you want to inject it. If you are in a vacant lot, right there, if you are in a waste container, you get inside there to inject because we don’t have a chance to go home because we are desperate ...’ (Male, age 37, Tijuana)

While very few men reported using drugs in their homes, one participant in Cd. Juarez described how his fear of being arrested in a shooting gallery led him to inject there exclusively.

‘I did use to go to the shooting galleries, I would get to a place where one can go and use and just leave the fee they ask you for, like 5 or 10 pesos to let you get drugged there, but, those are very risky places, because at any moment can, can arrive, arrive the police or something like that, do you understand me? And because I haven’t been lucky several times, they arrived when I was there in the shooting gallery and I had to spend some hours in jail and that is why now I do it at home. In my house is where I do everything’. (Male, age 23, Cd. Juarez)

### Relationship dynamics

For women, drug use was often a social experience shared with friends, partners and spouses. Many women expressed the importance of using drugs around people they knew and trusted.

‘There where I go [to inject drugs], well like, we are all friends from years ago, and the same people go always, and we hang out there, we chat or we get together for lunch or something like that, we spend time together’. (Female, age 25, Cd. Juarez)

At least half of the women in each city routinely reported injecting with a male partner, spouse or friend. One woman in Tijuana also reported using drugs with her female sexual partner. Given the familiarity and

comfort of injecting in the company of one’s spouse or partner, many women described sharing equipment, syringes and drugs exclusively with this person.

‘Only my husband injects me, he, he’s the only one that injects me; I don’t let anybody else touch me, only my husband’. (Female, age 34, Cd. Juarez)

I: Have you, um, injected with a syringe that is not yours?

S: Yes, yes, I have injected with my husband’s syringe, no one other than with my husband, I don’t inject myself with other people who are not my husband, I don’t use any other’s [syringe] than his. (Female, age 27, Cd. Juarez)

In Tijuana, 4 out of the 10 women reported never sharing their syringe with anyone, two said they only shared with their husbands and four described sharing syringes with several other people. In contrast, in Cd. Juarez, seven out of the 8 women reported sharing syringes with different people, while only one woman reported exclusively sharing with her husband. Nevertheless, husbands often influenced the context through which their wives interacted with other drug users, and the place they injected:

‘Well right now, we shoot up at home, my husband went to buy, and he bumped into a friend, and he had a car, a van, and things are very hot right now...it is hot in the shooting galleries right now [referring to police pressure], and there was a patrol parked there and everything, like, and well my husband told him to come over to shoot up to our house, in that way he wouldn’t have to shoot up there, and well, we lent him our syringe’. (Female, age 29, Cd. Juarez)

‘To be with my husband, we used to look for a place where to [inject], like he has more time using drugs, he knew, he knows many places, and I got to go with him. Where are we going to go to cure [inject]? But before it was only he and I, then I came to my house, and that is there where we cure, we buy the drug and we go our house’. (Female, age 43, Tijuana)

For the same woman, her relationship with her husband was protective in terms of influencing receptive but not distributive syringe sharing:

‘He and I [she and her husband] don’t share syringes from others. As I told you, my husband and I have let others borrow them and everything, but it depends if it is someone we know and trust, but when we share is because we are going to let them keep it...’ (Female, age 43, Tijuana)

For some female IDUs, there was an implicit hierarchy that determined the order in which she used a shared syringe. As one woman explained, she received the syringe after her friend's husband took two turns on the syringe.

'Ah, the husband, I mean my friend's guy, he came with, with the dose [drug] right... he made it, he dissolved it, he sucked it and cured first [drew up drug in the syringe and injected], then she cured, I cured her, and then, after he sucked more and passed me the, the dose'. (Female, age 30, Tijuana)

Compared to females, male-female relationships did not dominate the context through which male risk behaviours occurred, but their relationships with other men did play a role. When male IDUs reported difficulty-finding veins to inject, assistance was found among the other men they injected with at the time. These 'hit doctors' tended to be acquaintances or shooting gallery operators who offered their services in exchange for a few drops of drug, as described by men in each city:

'Because there are persons from the shooting gallery itself that are partners there and that they are there and help you to inject, you say "hey dude well... do me a favour ... inject me and I'll give you 10 drops" or 20 just so that they help you inject, it can be in the neck or in the hand, because we can't [inject] by ourselves'. (Male, age 36, Cd. Juarez)  
'I couldn't get the vein, so I told one of my partners that were there, that do me a favour please, put the injection in my throat, in the vein and he was the one who injected me in my throat...'. (Male, age 37, Tijuana)

### Sex trade involvement

In addition to their relationships with male IDUs, sex trade involvement was an important theme among female IDUs. Half of the women in Cd. Juarez and two of the women in Tijuana openly disclosed having exchanged sex for drugs or money.

'I started asking for money and then I started selling gum, and then I started stealing from my mother, my father, and now well, I don't rob because there's a lot of shields [police] here, there's a lot of security, but sometimes I prostitute myself ...to get a peso, for one peso one has to humiliate oneself'. (Female, age 18, Tijuana)  
'... so the guy that came looking for me invited me to go with him, actually he always comes looking for me, he just wants to have sex, he doesn't want

to get into issues [drugs], the asshole just wants to get laid with me, and it depends how much money he has on him is what he gives me, 20 dills or 150 pesos, 100 pesos, today he gave me 150 pesos, I bought a dose right away, I asked him to buy me a dose, he bought it and then we went to his place, we got high and we did what we had to and he gave me 100 pesos, and with that I bought the last dose'. (Female, age 34, Cd. Juarez)

One woman explained that she exchanged sex for money while her husband stole and washed cars in order to purchase drugs:

'Before I would shoot up to 6, 7 times, I would have to have 1,000 pesos daily, for me and my husband, I would have to prostitute myself before and he would have to rob, wash cars'. (Female, age 27, Cd. Juarez)

While many men reported having witnessed the exchange of sex for drugs in shooting galleries, very few revealed whether or not they had personally been involved.

'No, we arrange something, let's say if I met her in a shooting gallery, I talk with her and then we agree that I'm going to take her to somewhere else, where we can be just she and me alone and if I have money I give her some, or well, drug, but first we agree...'. (Male, age 23, Cd. Juarez)  
'...even they have asked me, that if I want to have sexual relations with some person and to give...half of what I have...of heroin...I am going to use, to give her half of it and ...and eh...well she is willing to have sexual relations with me'. (Male, age 39, Tijuana)

Additionally, one male participant in Tijuana described how male drug dealers take advantage of female drug users:

'...the ones that sell to the "locochonas" [female drug users] ...I have seen like that ...what ...ahah, how do you say it they suck the penis for one "madre"...and they take advantage, the one that sells...'. (Male, age 20, Tijuana)

### Discussion

In this qualitative study among IDUs in two Mexican border cities, important gender differences emerged in terms of how drugs were obtained, places in which drugs were injected, and the high-risk behaviours surrounding injection drug use, such as needle sharing and

the exchange of sex for money and/or drugs. While women and men shared some similar experiences and attitudes, important differences emerged regarding high-risk injection practices. Illicit drug use in the Mexican border region has not been extensively explored in the literature, particularly from a gender perspective, and may help inform the development of future interventions.

Many women in both Tijuana and Cd. Juarez reported that the purchase of drugs occurred inside or in close proximity to their home. This exchange was often planned or part of a pre-arranged schedule in which a dealer would come by their home at certain times of day. On the other hand, men in Tijuana and Cd. Juarez reported buying drugs in many locations, from different and unfamiliar sources. Activities surrounding the purchase of drugs by female IDUs in these settings may be occurring within established societal and cultural norms whereby women appear to stay close to home where they may have familial responsibilities and/or prefer the comfort of a familiar environment, whereas male IDUs tended to travel around the city to different areas and dealers to obtain their drugs. However, as a result of their involvement in sex work as a means to purchase drugs, female IDUs might also leave familiar surroundings and travel to different locations in search of clients, which influence the nature and size of their social networks.

Gender specific programming has emerged as an essential component for promoting prevention and reducing transmission of blood borne infections (Stein, 1990). According to gender role theory, men and women's behaviour is consistent with the expectations and traditions of their society (Eagly, 1987). In many Latin American regions, the traditional roles of men and women persist, namely the more public role of men and tendency towards domestic responsibilities of women (Melhuus & Stolen, 1996). These findings suggest that societal gender roles appear to be pervasive within IDU populations in these two settings, suggesting that harm reduction strategies and prevention efforts must accommodate such conditions, especially to reach more hidden females.

Similar gender differences emerged when participants described the location and environment where they most commonly injected drugs. Generally, men injected with friends, acquaintances, or other men at shooting galleries, in abandoned houses or lots, or on the street, while women often injected at home, with their husbands, sexual partners or close friends. For many male participants, where they used drugs was determined by feelings of withdrawal and the immediate need to inject, sometimes without regard to being

in a conspicuous location. Female IDUs on the other hand, tended to restrict their drug use to familiar surroundings and company, and in the case of one woman, avoiding male dominated shooting galleries. Although it was not mentioned directly, the comfort of remaining in the home could be a way for women to protect their own personal safety. Noteworthy, the brutal murders and sex crimes against several hundred women in Cd. Juarez have heightened the fear and vulnerability experienced by women, particularly among more marginalized groups involved in drug or sex trade and factory workers or 'maquiladoras' (Nathan, 2005).

Our findings suggest that the effective delivery of services and development of public health interventions to this population must consider both the physical environment in which IDUs congregate and their social context. Previous studies have highlighted the important relationship between social network characteristics and the transmission of blood-borne infections among IDUs (Friedman & Aral, 2001; Latkin et al., 1998; Miller & Neaigus, 2001; Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005). Our findings support literature that suggests that sexual and injection practices of IDUs are embedded within their social networks and relationships (Montgomery et al., 2002; Neaigus et al., 1994; Sherman, Latkin, & Gielen, 2001).

Consistent with existing literature, at least half of the women interviewed for this study reported exclusively injecting with their husband or sexual partner. Studies of IDUs in the U.S. indicate that female IDUs were more likely than males to have a sexual partner who also injects (Freeman, Rodriguez, & French, 1994; Gollub, Rey, Obadia, & Moatti, 1998; Latkin et al., 1998; Sherman et al., 2001). Studies from the U.S. and Canada reported that women were often initiated into drug use by male partners, supplied with drugs by their partners and were more likely to be "second on the needle" after their partner had finished injecting himself (Davies, Dominy, Peters, & Richardson, 1996; Dwyer et al., 1994; Gollub et al., 1998; Harvey et al., 1998). In a study from Baltimore, MD, women who had been initiated into drug use by men rather than women reported a greater number of lifetime sexual partners and were more likely to have engaged in sex work (Doherty, Garfein, Monterroso, Latkin, & Vlahov, 2000). A few women in Cd. Juarez who reported injecting and syringe sharing with their husbands also described exchanging sex for money to purchase drugs, suggesting that female injectors are influenced by intimate partners, not only by assuming a subordinate role when injecting drugs, but also by engaging in sex work or other high-risk sexual behaviour. These

findings underscore the extent to which female IDUs may be exposed to increased risk of disease transmission through syringe and equipment sharing with an IDU sex partner (Dwyer et al., 1994; Evans et al., 2003).

Our finding that female IDUs tended to purchase and inject drugs within a pre-specified social network and within their own neighbourhood suggests that behavioural interventions that aim to change norms within peer networks may be successful among female IDUs in this setting. Effective programs may also need to extend beyond smaller peer networks, given that several women in our sample had been involved with sex work and might therefore have larger personal networks. Research has demonstrated that personal relationships, social networks and prevailing gender norms can influence HIV and hepatitis risk behaviours related to syringe access, use and disposal (Siano, Gorry de Puga, & Springer, 2000). Furthermore, interventions that are gender-specific and that target peer and community norms have been more successful in generating significant reductions in high-risk sexual activity among female IDUs (Green, Pouget, & Ickovics, 2005).

While our study did not specifically examine the extent to which male sex partners control the injection process, it does suggest that this relationship should be more carefully examined and interventions developed among Mexican IDUs will need to take this factor into consideration. One avenue for further consideration should be the strength of network associations among female IDUs including the levels of trust between network associates in order to elucidate the best avenues for intervention (Weeks, Clair, Borgatti, Radda, & Schensul, 2002).

The high frequency of shooting gallery attendance we observed among male IDUs in Tijuana and Cd. Juarez suggests that venue-based interventions in shooting galleries may be especially useful for reaching high risk male IDUs in an effort to reduce the spread of blood borne infections. A previous study by our group (Strathdee et al., 2005) and other international literature have documented that shooting galleries are closely associated with risky injection practices including the sharing and renting of used syringes (Celentano et al., 1991; Chitwood et al., 1990; Reyes et al., 1996). All of the male IDUs in both study sites reported having shared syringes in shooting galleries. Shooting galleries are likely to be frequented by peer leaders such as shooting gallery managers, dealers and ‘hit doctors’ who may serve as important actors in changing the peer norms surrounding high-risk behaviours, including syringe sharing. Such settings

may also offer a kind of camaraderie and bonding for male IDUs.

A limitation of this study is that we did not specifically address gender issues in our interview guide. The questions we explored during the interview were not gender specific or sensitive to the differences in experiences between men and women, nor did we presume any prior hypotheses relating to gender differences, which could have allowed specific themes to be probed more deeply. Therefore, the distinctive experiences and narratives that were shared by men and women emerged independently from the interviews. A second limitation of our study was that we did not use respondent driven sampling to recruit subjects, and therefore our sample is not necessarily generalizable to the IDU populations in each city. Nevertheless, we observed saturation on a number of themes, which provides confidence that our findings are meaningful. Given that our sample size is small and that recruitment was limited to street locations and shooting galleries, it is possible that the experiences of less visible IDUs were underrepresented in this study. It is also possible that some IDUs who had been in previous contact with outreach staff were approached to participate in the study.

These preliminary data suggest the potential for HIV transmission among IDUs and possibly non-IDUs in Tijuana and Cd. Juarez, which warrants further in-depth investigation with larger samples. Our findings also suggest that interventions to reduce HIV risk behaviours among IDU populations should be gender-specific and take into account the context through which risk behaviours occur.

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